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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,038	11/08/2000	Zaheer Khalfan	1084-7/MBE	8013

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CANADA

EXAMINER
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RODRIGUEZ, JOSEPH C

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/708,038

**Applicant(s)**

KHALFAN, ZAHEER

**Examiner**

Joseph C Rodriguez

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-14 is/are allowed.
- 6) ☒ Claim(s) 1-3,6,7 and 15-22 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

### ***Claim Objections***

Regarding claim 1, the language "can be" (2<sup>nd</sup> line from end) is objected as it may render the claims indefinite as it is unclear whether the features subsequent to the "can be" language are a necessary part of the claimed invention. Applicant must positively recite the features of the claimed invention. Examiner thus recommends amending all instances of "can be" to "is" in the claim language. During examination, this "can be" limitation has been interpreted as an unnecessary part of the claimed invention unless otherwise noted.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Csulits (US 5,640,463).

Regarding claims 1-3, Csulits teaches a device (Fig. 2) comprising a light source with an ultraviolet component (lamp described in col. 5, ln. 25-33); a detector (202) for detecting diffusely reflected UV light from a paper product (col. 5, ln. 1-15) and generating a signal (col. 3, ln. 30-col. 4, ln. 38); an optical filter (Fig. 2, filter 206

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positioned before detector 202; col. 3, ln. 60-64) and an instrument for measuring a level of the signal (microcontroller 212; col. 4, ln. 20-col. 6, ln. 25 teaches the *comparing* of the signal to certain levels to determine validity of paper bills). Further, Applicant is respectfully reminded that claim language consisting of functional language and/or intended use phrasing is given little, if any, patentable weight as the apparatus must merely be capable of functioning, or being used, as claimed. See MPEP 2112.02, 2114. This is especially relevant with regards to the limitations in the preamble and the functional language in the claims. That is, the signal from the detection device is certainly capable of being compared to a reference level to determine whether the material contains less than or more than a selected amount of lignin. Applicant is also respectfully reminded that the material (i.e., material color) or article worked upon by the apparatus does not limit apparatus claims. See MPEP 2115.

Regarding claim 6, it is implicit from the filter types that the light source emits light outside the ultraviolet range (col. 3, ln. 60-65).

Regarding claim 7, the further feature of an equation defining the selected amount of lignin fails to add patentable weight to the claimed invention as the amount of lignin is simply part of a functional limitation and, moreover, Csulits is capable of performing said functional limitation.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-18 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Csulits in view of Eason (US 5,862,919).

Csulits as set forth above teaches all that is claimed except for expressly teaching a conveyor for conveying the material to a collection bin with an air blast ejection device downstream of said detection device, near a terminal end of said conveyor, for receiving an ejection signal from the comparing device. Eason, however, teaches these features in an automated sorting system including a conveyor with an ejection system connected to a comparing device for sorting objects (Fig. 1, col. 3, ln. 9-col. 5, ln. 22). Moreover, Eason teaches that this system is useful in high speed sorting applications for removing unacceptable objects (col. 1, ln. 5-10). Further, Csulits is merely silent on how the paper bills are conveyed and how the unacceptable bills are handled. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Csulits with the features taught by Eason above to enable high speed sorting of the unacceptable bills.

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over 15-18 and 21-22 as applied to claims above, and further in view of what is well known in the art.

Csulits in view of Eason as set forth above teach all that is claimed except for expressly teaching said ejection device including an air nozzle receiving air from a

compressor, wherein said nozzle is controlled by a solenoid valve. Eason, however, already describes an ejection device that includes solenoid-actuated puff-jets that discharge compressed gas (col. 4, ln. 31-64), thus Eason is merely silent on the compressor feature. Further, this compressor feature can be regarded as inherent from the teaching of *compressed* gas and, moreover, if not regarded as inherent, Examiner takes Official Notice that this feature is well known in the sorting arts. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Csulits in view of Eason with the specific ejection device features taught above as these are well known features in the sorting arts that assist in removing unacceptable objects during high-speed sorting operations.

#### ***Allowable Subject Matter***

Claims 8-14 are allowed.

Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Here, the newly cited references are regarded as helpful in defining the prior art with regards to lignin testing and ultraviolet testing systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph C Rodriguez whose telephone number is **703-308-8342**. The examiner can normally be reached on M-F during normal business hours (9 am – 6 pm, EST).

The **Official** fax phone number for the organization where this application or proceeding is assigned is **703-872-9326** (After-Final **703-972-9327**).

The examiner's **UNOFFICIAL Personal fax number** is **703-746-3678**.

Further, the examiner is tentatively scheduled to move in April 2005 and the contact info at the new location will be as follows:

**April 2005, Personal telephone number is 571-272-6942**

**April 2005, UNOFFICIAL Personal fax number is 571-273-6942**

Further, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only.

For more information about the PAIR system, see

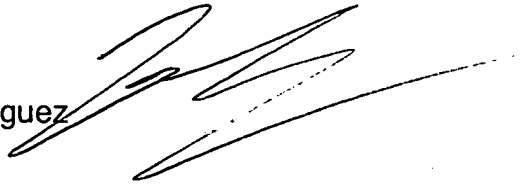
**<http://pair-direct.uspto.gov>**

Should you have questions on access to the Private PMR system, contact the Electronic Business Center (EBC) at 866-217-9197 (Toll Free).

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Alternatively, inquiries of a general nature or relating to the status of this application or proceeding can also be directed to the **Receptionist** whose telephone number is **703-308-1113**.

Signed by Examiner Joseph Rodriguez

A handwritten signature in black ink, appearing to be 'JR' with a long horizontal stroke extending to the right.

Jcr

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February 14, 2005